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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,219	01/16/2001	Shinya Muraoka	Q62673	9948
7590 07/12/2005 SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037			EXAMINER KADING, JOSHUA A	
			ART UNIT 2661	PAPER NUMBER

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,219

Applicant(s)

MURAOKA, SHINYA

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of U.S. Patent 5,886,842, Ziporovich.

Regarding claim 1, AAPA discloses "DC-offset eliminating method for a receiving circuit of a receiver which receives signals comprising a plurality of frames continuously sent to the receiving circuit, each of the frames comprises an alignment portion (*page 1, line 13 of the specification*) and a signal-end indication portion (*page 2, line 9 of the specification*) showing as to whether other frames continuously follow said frames and a preamble portion added only at the head of each frame, wherein the method comprises: calculating a DC-offset component depending upon the received signals (*page 3, lines 3-5 of the specification*); subtracting said DC-offset component from the received signals (*page 3, lines 3-8 of the specification*); and performing a DC-offset eliminating operation based on the subtracted result (*page 3, lines 3-8 of the specification*), wherein a DC offset follow-up speed is reduced... (*page 3, lines 11-24 of the specification*)... said DC-offset eliminating operation changing said DC-offset follow-up speed in accordance with a frame-continuation detection signal and a received frame signal (*page 6, lines 18-*

25 of the specification, where signal D10 acts to inform the circuit of a frame received and S2 is the frame-continuation detection signal)."

However, AAPA lacks what Ziporovich discloses, "...when said preamble portion is being received, regardless of a time when a continuous reception is performed in which all of said frames are received to recognize the timing of the frame number to be received or a time when an intermittent reception is executed in which only a frame destined for said receiver itself is received (*col. 6, lines 9-21*)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the "follow-up speed" changed "with respect to the DC offset when said preamble portion is being received" with the rest of the method for the purpose of finding an appropriate DC correction value prior to the reading of the user data (*Ziporovich, col. 6, lines 21-24*). The motivation being that knowing the appropriate correction value prior to the reading of the user data allows all of the data to be properly decoded because the "learning curve" to find the offset happened during the preamble not the data.

Allowable Subject Matter

3. Claims 4 and 5 are allowed as indicated previously.
4. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 27 April 2005 have been fully considered but they are not persuasive.

Applicant argues the following points:

1) Neither Ziperovich nor AAPA disclose, "during acquisition mode...the known data preamble reduces a DC offset follow up speed, or that the known data preamble even initiates such a reduction." See REMARKS, page 7, third paragraph.

2) Neither Ziperovich nor AAPA disclose, "changing a DC-offset follow-up speed based either [on] a frame continuation detection signal and/or a received frame signal. See REMARKS, page 7, third paragraph.

3) Neither Ziperovich nor AAPA disclose that the DC offset follow up speed is controlled by the frame continuation detection signal and a received frame signal. See REMARKS, page 8, first paragraph.

4) Since neither Ziperovich nor AAPA disclose the DC offset follow up speed is controlled based on the frame continuation detection signal and a received frame signal, there can be no motivation for combining Ziperovich and AAPA. See REMARKS, page 8, first full paragraph.

The examiner respectfully disagrees for the following reasons:

1) There is no mentioning in claim 1 of the preamble reduces a DC offset follow up speed or that the preamble initiates the reduction. All that is said is that the reduction occurs "when said preamble portion is being received." Although the specification may

support the assertion that the preamble reduces the follow up speed and initiates reduction, it would be improper to read these limitations into the claims.

2) As noted in the rejection above, AAPA fully discloses both a frame received signal D10 and a frame continuation signal S2 as seen in figure 4.

3) In AAPA, page 3, lines 11-21 of the specification taken with figure 4, signals D10, S2, DI5, and DQ5, and element 4, the DC follow up speed used to create signals DI5 and DQ5 show the DC follow up speed is calculated with the frame continuation signal S2 and frame received signal D10.

4) Since AAPA in view of Ziporovich fully disclose all the limitations of the claimed invention, and there is motivation disclosed in Ziporovich that suggests a reason to combine the two references, there is no basis for the argument that there is no motivation to combine the references. Further, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

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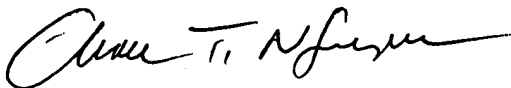
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

July 5, 2005



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600